

3. (Unamended) A method according to claim 1, wherein the agent effects an increase in binding of the sensor to the first receptor.

4. (Unamended) A method according to claim 1, wherein the sensor is at a concentration of less than about 10 nM.

5. (Unamended) A method according to claim 1, wherein the sensor comprises an amphipathic alpha helix.

A2  
6. (Amended) A method according to claim 1, wherein the sensor comprises the sequence  $L_1X_1X_2L_2L_3$  (SEQ ID NO:18), wherein  $L_1-L_3$  are independently selected from hydrophobic amino acids and  $X_1-X_2$  are independently selected from any amino acid.

7. (Unamended) A method according to claim 1, wherein the sensor comprises a peptide sequence selected from KLVQLTTT (SEQ ID NO:1), ILHRLLE (SEQ ID NO:2), LLRYLLDK (SEQ ID NO:3), LLRYLLD (SEQ ID NO:4), LRYLLD (SEQ ID NO:5), LLRYLL (SEQ ID NO:6), LRYLL (SEQ ID NO:7), LLRYLLDKD (SEQ ID NO:8), QLLRYLLDKD (SEQ ID NO:9), HQLRYLLDKD (SEQ ID NO:10), PQAQKSLQQLT (SEQ ID NO:11), LLQQLLE (SEQ ID NO:12), VTLLQLLG (SEQ ID NO:13), ILRKLLE (SEQ ID NO:14), ILKRLLE (SEQ ID NO:15), ILRRLLE (SEQ ID NO:16) and ILKKLLE (SEQ ID NO:17).

8. (Unamended) A method according to claim 1, wherein the first receptor, peptide and agent are in solution.

9. (Unamended) A method according to claim 1, wherein the peptide comprises a fluorescent label and the measuring step comprises detecting fluorescence polarization of the label.

10. (Unamended) A method according to claim 1, wherein the mixture further comprises a ligand of the first receptor.

11. (Unamended) A method according to claim 1, wherein the sensor provides direct, assay detectable, ligand dependent binding to the first receptor under assay conditions.

A3  
12. (Amended) A mixture consisting essentially of a nuclear hormone receptor, a candidate agent and a peptide comprising the sequence  $L_1X_1X_2L_2L_3$  (SEQ ID NO:18) covalently coupled to a detectable label, wherein  $L_1-L_3$  are independently selected from hydrophobic amino acids and  $X_1-X_2$  are independently selected from any amino acid and wherein the peptide provides direct, in vitro ligand-dependent binding to the receptor and comprises 24 or fewer amino acids.

13. (Unamended) The mixture of claim 12, in which the binding is enhanced in the presence of the agent.

94 14. (Amended) A mixture consisting essentially of a nuclear hormone receptor, a ligand of the receptor, a candidate agent, and a peptide comprising the sequence  $L_1X_1X_2L_2L_3$  (SEO ID NO:18) covalently coupled to a detectable label, wherein  $L_1$ - $L_3$  are independently selected from hydrophobic amino acids and  $X_1$ - $X_2$  are independently selected from any amino acid and wherein the peptide provides direct, in vitro ligand-dependent binding to a nuclear hormone receptor and comprises 24 or fewer amino acids.

15. (Amended) A sensor consisting essentially of a peptide comprising the sequence  $L_1X_1X_2L_2L_3$  (SEO ID NO:18) covalently coupled to a detectable label, wherein  $L_1$ - $L_3$  are independently selected from hydrophobic amino acids and  $X_1$ - $X_2$  are independently selected from any amino acid and wherein the peptide provides direct, in vitro ligand-dependent binding to a nuclear hormone receptor and is 24 or fewer residues in length.

16. (Unamended) A sensor according to claim 15, wherein the label is a fluorescent label coupled to the N-terminus of the peptide and the peptide is 12 or fewer residues in length.

17. (Unamended) A method according to claim 1, wherein the measuring step comprises detecting the sensor of immobilized first receptor-sensor complexes.

18. (Unamended) A method according to claim 1, wherein the measuring step comprises detecting the receptor of immobilized first receptor-sensor complexes.

19. (Unamended) A method according to claim 1, wherein the measuring step, the first receptor is immobilized through the sensor.

20. (Unamended) A method according to claim 1, wherein the sensor comprises a label and wherein the measuring step, the first receptor is immobilized through the sensor and the sensor is immobilized through the label.

21. (Unamended) A method according to claim 1, wherein the sensor comprises a label and wherein the measuring step, the first receptor is immobilized through the sensor, and the sensor is immobilized through the label by a second receptor.

22. (Unamended) A method according to claim 1, wherein the sensor comprises a label and wherein the measuring step, the first receptor is immobilized through the sensor, and the sensor is immobilized through the label by a second receptor and wherein the measuring step comprises detecting the immobilized first receptor.

23. (Unamended) A method according to claim 1, wherein the sensor comprises a label and wherein the

measuring step, the first receptor is immobilized through the sensor, and the sensor is immobilized through the label by a second receptor and wherein the measuring step comprises detecting the immobilized first receptor with a third receptor.

24. (Unamended) A method according to claim 1, wherein the sensor comprises an epitope label, wherein the measuring step, the first receptor is immobilized through the sensor and the sensor is immobilized through the label by a second receptor comprising an immobilized epitope label-specific antibody moiety.

25. (Unamended) A method according to claim 1, wherein the sensor comprises a biotin label and wherein the measuring step, the first receptor is immobilized through the sensor and the sensor is immobilized through the label by a second receptor comprising an immobilized avidin moiety.

26. (Unamended) A method according to claim 1, wherein the measuring step, the sensor is immobilized through the first receptor.

27. (Unamended) A method according to claim 1, wherein the measuring step, the sensor is immobilized through the first receptor and the first receptor is immobilized through a second receptor.

28. (Unamended) A method according to claim 1, wherein the measuring step, the sensor is immobilized through the first receptor and the first receptor is immobilized through a second receptor and wherein the measuring step comprises detecting the immobilized sensor.

29. (Unamended) A method according to claim 1, wherein the measuring step, the sensor is immobilized through the first receptor and the first receptor is immobilized through a second receptor and wherein the measuring step comprises detecting the immobilized sensor with a third receptor.

30. (Unamended) A method according to claim 1, wherein the measuring step, the sensor is immobilized through the first receptor and the first receptor is immobilized through a second receptor comprising a receptor specific antibody.

31. (New) A method according to claim 1, wherein the sensor comprises 12 or fewer amino acids.

#### REMARKS

The forgoing amendments insert the word "method" in line 1 of claim 1 providing proper antecedent basis for the dependent claims and provide a SEQ ID reference number in line 2 of claims 6, 12 and 14, and line 1 of claim 15. The same amendments were made in the prior application USSN 09/975,614. Further, the amendments recite "in vitro" in line 2 of claim 1,